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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/798,682

Applicant(s)

SCHWARTZ, JOEL A.

Examiner

Branon C. Painter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 24-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23, 32 and 33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/30/04 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 06/17/04.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-23, 32, and 33, drawn to a rigid insulation product, classified in class 052, subclass 404.1.
 - II. Claims 24-31, drawn to a method of constructing a floor of a structure, classified in class 052, subclass 403.1.
2. Inventions rigid insulation product and method of constructing a floor structure are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process of constructing the floor of a structure can be used to make another materially different product, e.g. the ceiling of a structure.
3. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction was not required because the inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Celia H. Leber on April 23, 2007 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-

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23, 32, and 33. Affirmation of this election must be made by applicant in replying to this Office action. Claims 24-31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Information Disclosure Statement

5. The information disclosure statement (IDS) submitted on 06/17/04 was filed after the mailing date of the non-provisional application on 03/11/04. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

6. The drawings were received on 08/30/04. These drawings are objected to as detailed below.
7. The drawings are objected to under 37 CFR 1.83(a) because they fail to show detail A in Figure 3 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the

appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

8. The disclosure is objected to because of the following informalities: the descriptions for Figures 4 and 5 are on the same line (Description of Drawings section, line 4). The description of each figure should begin on a new line. Appropriate correction is required.

Claim Objections

9. Claim 32 is objected to because of the following informalities: the C-shaped cross-section claimed is not disclosed in the drawings. The drawings must show every feature of the invention specified in the claims. Therefore, the C-shaped cross-

section of claim 32 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Appropriate correction is required.

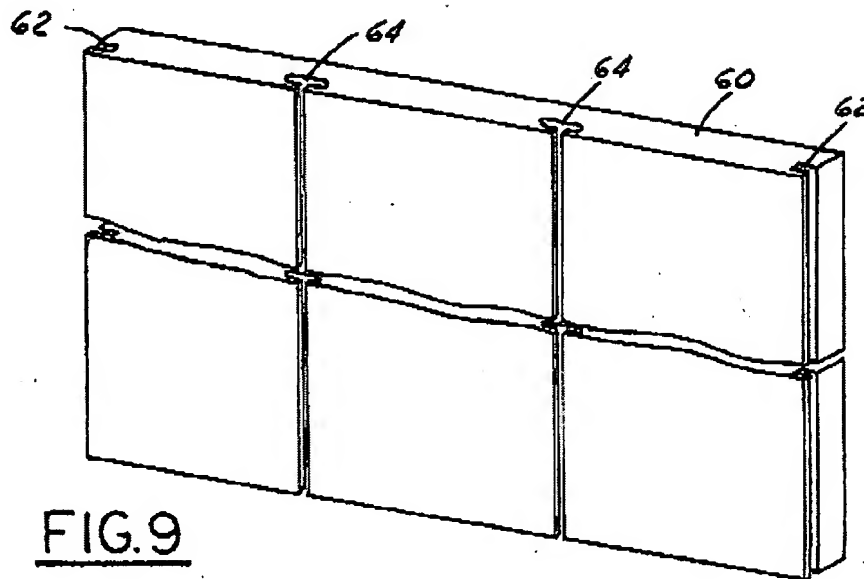
Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-3, 5, 7, 8, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Kubica (U.S. Patent No. 6,349,520).
12. Regarding claim 1, Kubica discloses a rigid insulation product having all of the applicant's claimed structure, including:
- a. "A rigid insulation product comprising a single unitary insulating member..." ("insulating panel" 60, Fig. 9).
 - b. "...and including a plurality of slots extending width-wise across the member..." ("recesses" 64, Fig. 9).



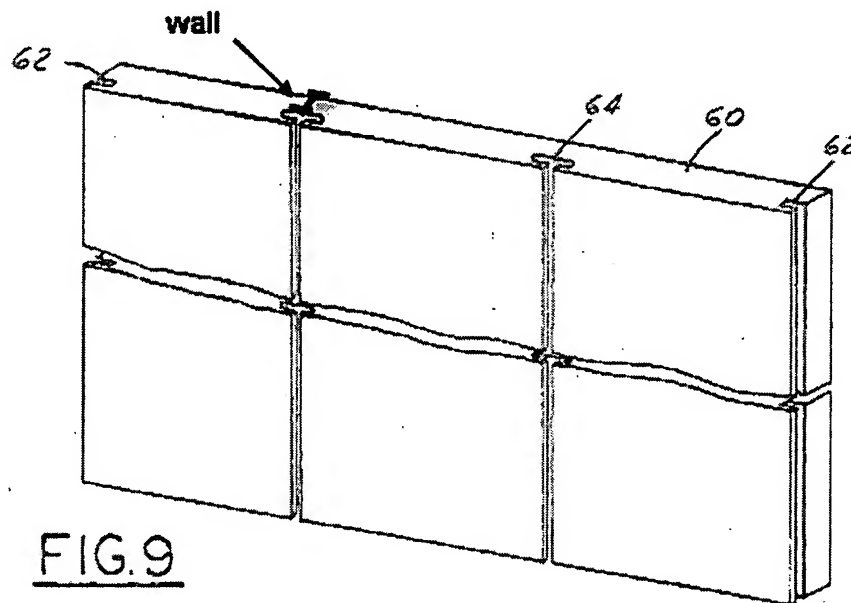
Reproduced from U.S. Patent No. 6,349,520

13. The examiner notes that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Intended use recitations in the claimed invention include, but are not limited to, "for use in wood frame construction" (claim 1) and "each slot being dimensioned to receive an end of a floor joist" (claim 1).
14. The examiner further notes that a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations

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are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

15. Regarding claim 2, Kubica discloses slots disposed at spaced intervals ("recesses" 64, Fig. 9).
16. Regarding claim 3, Kubica discloses a wall at the base of each slot thick enough to provide a thermal break between the joist end and the joist header ("wall," examiner amended Fig. 9 below).



Reproduced from U.S. Patent No. 6,349,520 (Amended by Examiner to Highlight Details)

17. Regarding claim 5, Kubica discloses slots extending the entire width of the insulating member ("recesses" 64, Fig. 9).
18. Regarding claim 7, Kubica discloses an insulating member comprised of polystyrene ("insulating panel" 60, Fig. 9; "Insulating panels such as polystyrene foam boards..." column 2, lines 12-13).

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19. Regarding claim 8, Kubica discloses slots that can receive an I-beam ("recesses" 64, Fig. 9).

20. Regarding claim 32, Kubica discloses slots that are capable of receiving an I-beam ("recesses" 64, Fig. 9).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

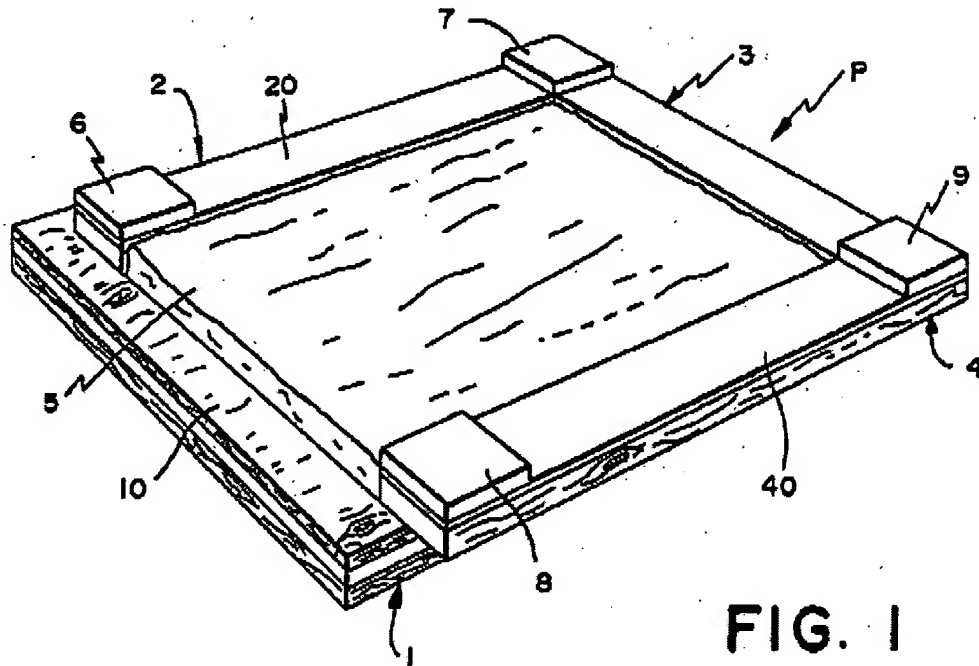
obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

23. Claims 4, 6, 13-19, 22, 23, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubica (U.S. Patent No. 6,349,520) in view of L'Heureux (U.S. Patent No. 4,967,529).

24. Regarding claims 4 and 16:

- a. Kubica discloses a rigid insulation product as set forth above.
- b. Kubica does not expressly disclose that the rigid insulation product is mounted to a wood member, or that the width of the rigid insulation product is substantially equal to the width of the wood member on which it will be mounted.
- c. L'Heureux discloses the mounting of insulating foam to a wood member, where the width of the insulating foam is substantially equal to the width of the wood member ("high density polyurethane foam pad" 8 and "lath" 4, Fig. 1). The mounting of a rigid insulation product to a wood member (such as a joist member) as taught by L'Heureux results in a compound member with increased structural rigidity.
- d. Kubica and L'Heureux are analogous art because both are from the same field of endeavor of structural insulation.
- e. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to mount the rigid insulation product on a wood member (such as a joist header) to increase the structural rigidity of the assembly.



Reproduced from U.S. Patent No. 4,967,529

25. Regarding claims 6 and 33:

- a. Kubica discloses a rigid insulation product as set forth above.
- b. Kubica does not expressly disclose that the rigid insulation product is attached to a joist header.
- c. L'Heureux discloses the mounting of insulating foam to a joist header ("high density polyurethane foam pad" 8 and "lath" 4, Fig. 1). The mounting of a rigid insulation product to a joist header as taught by L'Heureux results in a compound member with increased structural rigidity.
- d. Kubica and L'Heureux are analogous art because both are from the same field of endeavor of structural insulation.

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- e. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to mount the rigid insulation product to a joist header to increase the structural rigidity of the assembly.

26. Regarding claims 13-15 and 17-19:

- a. Kubica discloses a rigid insulation product comprising a single unitary insulating member and a plurality of slots extending width-wise [claim 13]. Also disclosed by Kubica are slots disposed at spaced intervals [claim 14], a wall at the base of each slot thick enough to provide a thermal break [claim 15], slots extending the entire width of the insulating member [claim 17], an insulating member comprised of polystyrene [claim 18], and slots that can receive an I-beam [claim 19].
- b. Kubica does not expressly disclose a wood member mounted on the rigid insulation product [claim 13].
- c. L'Heureux discloses a wood member (such as a joist member) mounted on the rigid insulation product ("lath" 4 made of plywood and "high density polyurethane foam pad" 8, Fig. 1). The mounting of a wooden member to a rigid insulation product as taught by L'Heureux results in a compound member with increased structural rigidity.
- d. Kubica and L'Heureux are analogous art because both are from the same field of endeavor of structural insulation.
- e. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to mount a wooden member (such as a joist member)

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on the rigid insulation product in order to increase the structural rigidity of the assembly.

27. Regarding claims 22 and 23:

- a. Kubica in view of L'Heureux discloses the claimed invention, including showing the wall having a thickness ("insulating panel" 60, Fig. 9). However, Kubica does not specify a wall thickness of at least 0.375 inches, and a thickness between the slots of from about 1.0 to 3.5 inches. It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize these thicknesses to provide sufficient insulation while conserving insulating material, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *MPEP 2144.05*.
- b. The examiner further notes it would have been obvious to coordinate thicknesses with desired insulation ability, e.g. a thicker product would be a better insulator.

28. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubica (U.S. Patent No. 6,349,520) in view of Berdan, II (U.S. Patent No. 6,042,911).

- a. Kubica discloses a rigid insulation product as set forth above.
- b. Kubica does not expressly disclose that the slots are spaced at intervals of about 16 inches or about 24 inches.

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- c. Berdan, II discloses "most framing has a standard or traditional size of either 16 inches or 24 inches between joists" (column 1, line 67 – column 2, line 2). The spacing of joist-receiving slots as taught by Berdan, II results in industry standard spacing common to the art of wood frame construction.
- d. Kubica and Berdan, II are analogous art because both are from the same field of endeavor of building insulation.
- e. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to space the joist-receiving slots 16 or 24 inches apart to abide by industry standards.

29. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubica (U.S. Patent No. 6,349,520).

- a. Kubica discloses the claimed invention, including showing the wall having a thickness ("insulating panel" 60, Fig. 9). However, Kubica does not specify a wall thickness of at least 0.375 inches, and a thickness between the slots of from about 1.0 to 3.5 inches. It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize these thicknesses (wall thickness of 0.375 inches and slot thickness between 1.0 and 3.5 inches) to provide sufficient insulation while conserving insulating material, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *MPEP 2144.05*.

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- b. The examiner further notes it would have been obvious to coordinate thicknesses with desired insulation ability, e.g. a thicker product would be a better insulator.

30. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubica (U.S. Patent No. 6,349,520) in view of L'Heureux (U.S. Patent No. 4,967,529) as applied to claims 13-15 and 17-19 above, and further in view of Berdan, II (U.S. Patent No. 6,042,911).

- a. Kubica discloses a rigid insulation product as set forth above.
- b. Kubica does not expressly disclose that the slots are spaced at intervals of about 16 inches or about 24 inches.
- c. Berdan, II discloses "most framing has a standard or traditional size of either 16 inches or 24 inches between joists" (column 1, line 67 – column 2, line 2). The spacing of joist-receiving slots as taught by Berdan, II results in industry standard spacing common to the art of wood frame construction.
- d. Kubica and Berdan, II are analogous art because both are from the same field of endeavor of building insulation.
- e. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to space the joist-receiving slots 16 or 24 inches apart to abide by industry standards.

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Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Branon C. Painter whose telephone number is (571) 270-3110. The examiner can normally be reached on Mon-Fri 7:30AM-5:00PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on (571) 272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Victor Batson
Supervisory Patent Examiner
Art Unit 3609

Branon Painter
04/19/2007